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| AF | PLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---------------------------------------|---------------|---------------|----------------------|-------------------------|------------------|--|
| | 10/600,211 | 06/20/2003 | Boris Ravdel | D-187 | 5816 | |
| | 759 | 90 02/24/2006 | | EXAMINER | | |
| Attorney John R. Doherty P.O. Box 706 | | | MERCADO, JULIAN A | | | |
| Stevenson, CT 06491-0706 | | 06491-0706 | | ART UNIT | PAPER NUMBER | |
| | · | | | 1745 | | |
| | | | | DATE MAILED: 02/24/2006 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | · | | > | | | | |
|---|--|--|--|---|--|--|--|--|
| | | Application No. | Applicant(s) | • | | | | |
| | | 10/600,211 | RAVDEL ET AL. | | | | | |
| | Office Action Summary | Examiner | Art Unit | | | | | |
| | | Julian Mercado | 1745 | | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | |
| WHIC - Exte after - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAYS IN THE MAILING DAYS IN THE MAILING DAYS IN THE MAILING DAYS IN THE MEDICAL SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timularly and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | N. nely filed the mailing date of this communicat D (35 U.S.C. § 133). | | | | | |
| Status | | | | | | | | |
| 1) | Responsive to communication(s) filed on | | | | | | | |
| 2a) <u></u> ☐ | This action is FINAL. 2b)⊠ This action is non-final. | | | | | | | |
| 3)[| Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | | |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposit | ion of Claims | | | | | | | |
| 4)⊠ | Claim(s) 1-25 is/are pending in the application. | | | | | | | |
| • | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) | 5) Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ | 6)⊠ Claim(s) <u>1-25</u> is/are rejected. | | | | | | | |
| · | Claim(s) is/are objected to. | | | | | | | |
| 8)[| Claim(s) are subject to restriction and/or | r election requirement. | | | | | | |
| Applicat | ion Papers | | | | | | | |
| 9) | The specification is objected to by the Examine | r. | | | | | | |
| · — | 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| Priority (| under 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | | | |
| | 2. Certified copies of the priority documents | • • | | | | | | |
| | 3. Copies of the certified copies of the prior | * | a in this National Stage | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| | see the attached actually children action for a lieu | or the continue copies flot reserve | u. | | | | | |
| Attachmen | at(s) | | | | | | | |
| | ce of References Cited (PTO-892) | 4) Interview Summary | | | | | | |
| | ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | Paper No(s)/Mail Da 5) Notice of Informal P | ate Patent Application (PTO-152) | | | | | |
| | er No(s)/Mail Date | 6) Other: | | | | | | |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Heller (U.S. Pat. 3,922,174).

See col. 4 lines 27-54.

Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Domeniconi et al. (U.S. Pat. 4,403,021).

See Abstract and col. 1 line 25-41.

Claims 1-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsufuji et al. (U.S. Pat. 5,759,714).

Matsufuji et al. is applied towards all of claims 1-25 for the following detailed reasons: Matsufuji et al. teaches a lithium-ion battery, i.e. a battery that reversibly absorbs and desorbs lithium, having a solution of a lithium salt in a non-aqueous organic solvent and containing a Lewis base additive such as triethylenediamine, i.e. 1,4-diazabicyclo[2.2.2]octane. See col. 2 line 56-65 and col. 4 line 67 et seq. The lithium salt is LiPF₆, *inter alia*. See col. 3 line 30. The

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electrolyte is an organic carbonate such as ethylene carbonate, inter alia. See col. 7 line 30 et

seq. The anode, i.e. negative electrode is a carbonaceous material. See col. 13 line 4-29. The

cathode, i.e. positive electrode is LiCoO₂, inter alia. See col. 12 line 51 et seq.

The alleged inventive feature as understood by the examiner is a non-aqueous electrolyte containing a Lewis base additive. To this extent, the examiner notes that claims 2 and 16 is each recited in Markush format consisting of amines, phosphines and nitrogen-phosphorus bonded compounds. The triethylenediamine additive disclosed by Matsufuji et al. is readable on the amine compound of claims 2 and 16. Thus, claims 4 and 18 which further recites a phosphine compound and claims 5 and 19 which further recites a nitrogen-phosphorus bonded compound is anticipated by Matsufuji et al. to the extent that triethylenediamine is readable on an amine compound and insofar as the phosphine and nitrogen-phosphorus bonded compounds of claims 4, 5, 18 and 19 are not positively recited in the claims. Notwithstanding the disclosure of Matsufuji et al. towards the non-aqueous electrolytes (ib.), a similar interpretation is applied towards claims 11-13 and 25 which recites a Markush group of organic carbonates, esters, ethers, glymes, organic nitriles, sulfones and mixtures thereof.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

PATRICK JOSEPH RYAN SUPERVISORY PATENT EXAMINER

Jiant.